

KALINICHENKO, A.P., inzh.

Device for indicating the shift of the axle of feed pump rotors.  
Energetik 11 no.3:11-14 Mr '63. (MIRA 16:4)

(Turbogenerators)  
(Pumping machinery, Electric)

KALINICHENKO, B., brigadir

How we transported grain. Avt.transp. 40 no.12:6-7 D '62.

(MIRA 15:12)

1. Brigada kommunisticheskogo truda shofeorn Taganrogskoy  
avtokolonny No.1192.

(Taganrog region—Grain—Transportation)

KAZANTSEV, Ye.I.; KONDRATOV, P.I.; KALINICHENKO, B.S.; GEL'MAN, A.D.

Study of the elution of neptunium from the anion exchanger AM.  
Radiokhimiya 4 no.1:81-84 '62. (MIRA 15:4)  
(Neptunium) (Ion exchange resins)

*KALINICHENKO, B. V.*

SAGINOV, V. N., and B. V. KALINICHENKO

Otsenka gidravlicheskogo soprotivleniia pyleotdeliaiushchego fil'tra  
vsasyvaiushchei sistemy samoleta. Moskva, Oborongiz, 1946.

Title tr.: Evaluation of hydraulic resistance of the dust-separating  
filter in an air-craft intake system.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of  
Congress, 1955.

L 12422-63

EWI(d)/FCC(w)/EDS AFFTC/ASD IJP(G)

ACCESSION NR: AP3001388

S/0020/63/150/COL/0736/0739

AUTHOR: Kalinichenko, D. F.

54

TITLE: Functional space  $K$  sub  $LAMBDA$ , sup  $n$  (OMEGA). Several applications of the theory of boundary value problems.

SOURCE: AN SSSR. Doklady, v. 150, no. 4, 1963, 736-739

TOPIC TAGS: functional space, boundary value, Sobolev space, abstract Hilbert space

ABSTRACT: This is a study of the functional space  $K$  sub  $LAMBDA$ , sup  $n$  (OMEGA) which is a subspace of the Sobolev spaces  $W$  sup  $l$ , sub  $p$  and  $W$  sup  $n$ , sub  $p$ , Alpha sub  $l$  ..... Alpha sub  $s$ . The theory of abstract Hilbert space was extensively utilized as applied to the theory of boundary value problems for elliptic type equations of various orders and for equations degenerating at the boundaries. Various boundary conditions were considered. "I take this opportunity to express my appreciation to V. I. Kondrashev for the suggested theme and valuable advice. Orig. art. has: 7 formulas.

ASSOCIATION: Moskovskiy inzhenergo-fizicheskiy institut (Moscow Engineering-Physics Institute)

Card 1/2

KALINICHENKO, D.F. (Moskva)

Some properties of functions from  $W_p^m$  and  $W_{p, \alpha_1, \dots, \alpha_s}^m$  spaces.

Mat. sbor. 64 no.3:436-457 J1 '64.

(MIRA 17:12)

TOMASHEVSKIY, V., podpolkovnik; KALINICHENKO, F., polkovnik

New tasks and obsolete methods. Voen.vest. 42 no.9:77-80  
S '62.

(MIRA 15:8)

(Russia--Army--Officers)

APTER, D.M.; KALINICHENKO, F.I.

Exchange of experience. Zav.lab. 28 no.7:885-886 '62 (MIRA 15:6)

1. Institut khimii Sibirskogo otdeleniya AN SSSR.  
(Testing machines)



APTER, D.M.; KALINICHENKO, F.I.

Pyrolysis of heavy tar obtained by semicoking of Cheremkhovo coals. Izv. Sib. otd. AN SSSR no.2:121-122 '62. (MIRA 16:10)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR, Irkutsk.

ACC NR: AT6033994

SOURCE CODE: UR/3227/64/003/000/0082/0085

AUTHOR: Kalinichenko, G. L.

ORG: none

TITLE: Distribution comparison of intervals between meteor radio echoes during the maxima of the Geminid and Quadrantid streams and during their absence

SOURCE: Tomsk. Institut radioelektroniki elektronnoy tekhniki. Trudy, v. 3, 1964, 82-85

TOPIC TAGS: meteor stream, meteor tracking, meteor observation, *meteor, radar meteor observation*

ABSTRACT: Experimental and theoretical data on the distribution of intervals between meteor radio-echoes are compared. In making the comparison the random character of meteors entering the atmosphere on a purely sporadic background and on the backgrounds of the Geminide and Quadrantide meteor streams was assumed. Analysis of histograms and graphs of the interval distribution between radio-echos demonstrates that experimental and theoretical calculations correlate satisfactorily. The number of meteor radio-echo appearances per unit of time is a random quantity whose distribution can be related to Poisson's distribution. Experimental data and calculations confirm the hypothesis concerning the random entry of meteors into the atmosphere during periods when meteor streams are present or absent. Their

Card 1/2

ACC NR: AT6033994

grouping agrees with theoretical distribution of intervals between meteor radio-  
echoes. Orig. art. has: 3 figures and 1 table.

SUB CODE: 03/ SUBM DATE: none/ ORIG REF: 002/

Card 2/2

ACCESSION NR: AR4014622

S/0269/64/000/001/0057/0057

SOURCE: RZh. Astronomiya, Abs. 1.51.391

AUTHOR: Fialko, Ye. I.; Kalinichenko, G. L.

TITLE: Distribution of intervals between meteor radio echoes

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 100, 1962, 28-34

TOPIC TAGS: radio echo, meteor, meteor radio echo, meteor radar set

TRANSLATION: The experimentally determined distribution of intervals between successive radio echoes is compared with the theoretical distribution, determined on the assumption of a random entry of meteors into the atmosphere, having the form

$$V N_m = N_{ep}(T) \Delta T = \frac{N_{ep} e^{-T/T} \Delta T}{T},$$

Card 1/2

Card 2/2

ACCESSION NR: AR3010552

S/0058/63/000/009/H045/H045

SOURCE: RZh. Fizika, Abs. 9Zh286

AUTHOR: Fialko, Ye. I. ; Kalinichenko, G. L.

TITLE: Concerning the distribution of intervals between meteor radio echoes

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 100, 1962, 28-34

TOPIC TAGS: meteor observation by radar, hourly number, radio echo, distribution of intervals

TRANSLATION: From the results of normal sounding of meteor trails at a wavelength of 10 m, the distribution of the intervals between neighboring radio echoes is plotted over time intervals up to nine hours, for different character of behavior of the hourly numbers. The distribution is in satisfactory agreement with the theoretical

Card 1/2

Using the results of radar measurements of the number of meteors, the author has constructed histograms of the number of the time signals between instants of appearance of meteor radio echoes for three cases: 1) from 03 to 06 hours, 14 December 1961; during the period of maximum meteor activity.

L 62846-65

ACCESSION NR: AR5017569

420, 573, and 590 per hour; 2) from 03 to 07 hours, 4 January 1960  
during the period of the maximum of the Quadrantide storm, with 500

per hour. The storm were observed. The storm were observed.

SUB CODE: EC, ES

ENCL: 00

Cord

2/2



L 29451-66 EWT(1) GW

ACC NRAR5023000

SOURCE CODE: UR/0269/65/000/008/0047/0047

AUTHOR: Kalinichenko, G. L.

36  
B

TITLE: Comparison of interval distribution between meteor radio-echoes during maximum flux periods of Geminides and Quadrantides and in the absence of flux

SOURCE: Ref. zh. Astronomiya, Abs. 8.51.424

REF SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 82-85

TOPIC TAGS: astronomic data, meteor observation, radio astronomy

ABSTRACT: On the basis of results obtained from radar counting of the number of meteors, histograms were drawn for 3 cases of the time distribution of intervals T between the moments of meteor radio-reflection appearances: 1) From 2 to 6 o'clock on December 14, 1959, during the maximum period of meteor flux with hourly numbers of 505, 420, 573, and 590. 2) From 3 to 7 o'clock on January 4, 1960, during the periods of maximum flux of Quadrantides with hourly number of 500, 460, 522, and 480. 3) From 5:34 to 9:34 o'clock on January 18, 1959, when known meteor flux were not observed. Theoretical curves were

Card 1/2

UDC: 523.164.8

KALINICHENKO, I. I.

7

CA

Detection and determination of nickel in bronzes and bronzes without using turnings. N. A. Tananaev and I. I. Kalinichenko (S. M. Kirov Ural Polytech. Inst., Sverdlovsk). *Zhur. Anal. Khim.* 5, 228-33 (1950).—The interfering elements in this method are Mn and Cu. The former, if present, should be removed as  $MnO_2$ . Cu is pptd. as sulfide by using CdS according to  $Cu^{2+} + CdS = CuS + Cd^{2+}$  (cf. C.A. 37, 1947). CdS powder is prepd. conveniently according to T. and Podchalinova (C.A. 34, 8789). Clean the metal surface and drill a small indentation or, if preferred, make a small paraffin ring. Use enough 7.5 N  $HNO_3$  to give sufficient soln. The dissolving is complete when no more gas is given off (7-20 min.). During soln. stir with a pointed glass rod. With a capillary, transfer the soln. to a test tube. Heat the soln. (0.5-1 ml.) to boiling, add a pinch of CdS, shake, and add another grain of CdS to make sure that there is a slight excess. This is recognized by yellow grains on the black ppt. or by a yellow suspension above the ppt. Filter by suction into a 10-ml. cylinder and wash 3-4 times with hot  $H_2O$ . If there is more than 0.15% of Ni cool, add  $H_2O$  to 10 ml., and use 1-2 ml. for the detn. Below 0.15% of Ni add 4-5 ml. of a satd. K Na tartrate, 0.4-0.6 ml. of Br water, mix, add 5-8 drops of 1% dimethylglyoxime and compare in a colorimeter with the soln. of a standard carried through all the above steps. If the unknown soln. is turbid, add  $NH_4OH$  dropwise to the disappearance of turbidity.

M. Horsch

CA KALINICHENKO, I. I.

7

Rapid determination of nickel in copal resin.---I---  
 Kalinichenko and O. P. Rudakova (Uralsk Polytech.  
 Inst.). *Zavodskaya Lab.* 16, 358-9(1950).---Ignite a  
 3-g. sample, treat the ash with a few drops of 6N HCl,  
 filter and wash with a little hot H<sub>2</sub>O. Dil. the filtrate to  
 10 ml., take 1-3 ml. aliquot, add 4-8 drops with Rochelle  
 salt soln., 0.3-0.5 ml. H<sub>2</sub>O, then enough 0.5% di-  
 methylglyoxime in 4% NaOH to give a slightly alk. soln.  
 Compare the color with standards. Extn. of Ni by HCl  
 from C<sub>12</sub>H<sub>2</sub> soln. of resin gave poor results, unless a little  
 Na<sub>2</sub>HPO<sub>4</sub> is present. G. M. Kosolapoff

KALINICHENKO, I. I.

1. ALENTSEV, M. N., BUKSHTEYN, S. M., KALINICHENKO, I. I., KUZINA, T. V.,  
PEKERMANN, F. M., CHISTYAKOVA, A. V.

2. USSR (600)

4. Ultraviolet Rays - Therapeutic Use

7. Luminophores for erythemous luminescent lamps. Izv. AN SSSR. Ser.fiz 15 no.  
6, 1951

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KALINICHENKO, I. I.

184T107

USSR/Physics - Sun Lamps

11 Jun 51

"Phosphors for Sun Lamps," I. I. Kalinichenko, F. M. Pekerman, A. K. Trofimov

"Dok Ak Nauk SSSR" Vol LXXVIII, No 5, pp 887-888

Describes application of calcium phosphate, activated by thallium. This phosphate extends ultraviolet spectrum and has max radiation at 325 mμ. First exptl luminescent lamps with this phosphate were constructed by S. I. Levikov and gave excellent results in med tests. Submitted by Acad A. N. Terenin 14 Apr 51.

184T107

KALINICHENKO, I.I.

Determination of iron in copper alloys with dimethyl-glyoxime in acid solution.  
Zhur. Anal. Khim. 8, 110-13 '53. (MIRA 6:4)  
(CA 47 no.20:10401 '53)

1. S.M.Kirov Ural Polytech. Inst., Sverdlovsk, U.S.S.R.

KALINICHENKO, I. I.

USSR/ Electronics - Inspection crews

Card 1/1 Pub. 133 - 10/19

Authors : Kalinichenko, I. I., Senior Technician of the Inspection Crew of the  
KIEV Audio - Telegraph Testing Section

Title : On the experiences of the inspection crew of an audio - telegraph testing section

Periodical : Vest. svyazi 1, 20 - 21, Jan 1955

Abstract : The inspection work of a special crew, engaged in testing the operation of the KIEV audio - telegraph line and their various experiences are described. The group pays particular attention to checking the amplification level, correcting the attenuation, and eliminating interferences. Illustration.

Institution: .....

Submitted: .....

RITSLAND, M.A.; KALINICHENKO, I.I., starshiy tekhnik.

Signal device for motor generator speed control in tone telegraphy.  
Vest.sviazi 16 no.1:11 Ja '56. (MIRA 9:5)

1. Starshiy inzhener proizvodstvennoy laboratorii Kiyevskogo  
tsentral'nogo telegrafa (for Ritsland).  
(Telegraph--Current supply)



AUTHOR: Kalinichenko, I.I. Senior Technician 111-58-7-7/27

TITLE: Distortions of Telegraph Signals in Apparatus with Automatic Rectified Current Control (Iskazheniya telegrafnykh signalov v apparature s avtomaticheskoy regulirovkoj vypryamlenogo toka)

PERIODICAL: Vestnik svyazi, 1958, <sup>18</sup> Nr 7, pp 12-13 (USSR)

ABSTRACT: The use of automatic rectified current control in telegraphic apparatus introduces characteristic distortions into individual code combination transmissions. This fact is not taken into account in estimating the state of an audio frequency carrier telegraph channel, which is evaluated only from the quality of the reception of the tone points. The author carried out experiments to study distortions, and worked out a better method of evaluating the quality of a channel and tuning for the receiver. The results of the experiments are shown in graphs 1 to 3 and tables 1 and 2. He concludes that a channel should be evaluated from the results of measuring the distortions of "6:1" and "text" code combinations. Technical personnel should be equipped with suitable measuring equipment and the requisite corrections must be made to the present operating standards and measurements.

Card 1/2

111-58-7-7/27

Distortions of Telegraph Signals in Apparatus with Automatic Rectified  
Current Control

There are 3 graphs and 2 tables.

ASSOCIATION: Kiyevskiy tsentral'nyy telegraf (Kiyev Telegraph Exchange)

1. Telegraph signals--Distortion 2. Electric current--Control

Card 2/2

KALINICHENKO, I. I.

AUTHORS: Kalinchenko, L.P., Strakhov, N.F.,  
Kalinichenko, I.I.

32-1-7/55

TITLE: New Color Reaction for the Ascertainment and Determination of Beryllium With Chrome-Blue K (Novaya tsvetnaya reaktsiya dlya otkrytiya i opredeleniya berilliya s khromsinim K).

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 1, pp. 22-23 (USSR)

ABSTRACT: Beryllium ions form a well soluble compound of bright-blue color with the acid chrome-blue K in the ammonia medium at pH-9-10. The effect produced by other ions (as e.g. Cu, Ni, Al, Co, Ba, Mg, Ca, Cd, Zn and others), which might produce colors with K, is eliminated by their addition to trilon. In this way it is possible to ascertain and quantitatively to determine beryllium. For the determination of beryllium a drop of the solution to be investigated is dropped onto filter paper; this is followed by a drop of ammonia buffer solution (20%), a drop of 0.1-n trilon B, and a drop of a 25% aqueous solution of acid chrome-blue K. If, after drying, a small blue or sky-blue spot forms in the center of the pink or violet-red spot, this indicates the presence of beryllium in the solution investigated. Otherwise, the same reaction may be observed in the test tube. If the beryllium content is not less than  $10^{-7}$  g/ml, a pinkish

Card 1/2

New Color Reaction for the Ascertainment and  
Determination of Beryllium With Chrome-Blue K

32-1-7/55

sky-blue color is obtained, and with a beryllium content of from  $3 \cdot 10^{-8}$  to  $10^{-7}$  g/ml the color will be bluish-violet. Within the range of  $2 \cdot 10^{-6}$  g/ml this color is in accordance with the Lambert-Beer law. The maximum of light absorption in a pure reagent amounts to 580-590 m $\mu$  and with the beryllium complex - 600-610 m $\mu$ . Results are given in a table; a second table deals with ascertaining the presence of beryllium in bronze. There are 2 tables.

ASSOCIATION: Sverdlovsk Medical Institute and Ural Polytechnical Institute  
im. S. M. Kirov (Sverdlovskiy meditsinskiy institut i  
Ural'skiy politekhnicheskiy institut im. S.M.Kirova).

AVAILABLE: Library of Congress

Card 2/2 1. Beryllium-Determination

AUTHOR: Kalinichenko, I.I.

32-3-4/52

TITLE: The Trilonometric Determination of Nickel in Alloyed Copper Without Separation (Trilonometricheskoye opredeleniye nikelya v legirovannoy medi bez yeye otdeleniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 266-267 (USSR)

ABSTRACT: In collaboration with Ye.Ya. Mekhanoshina and T.I. Morova a rapid method of determining nickel was developed. B.M. Dobkina and Ye.I. Petrova [Ref. 2] pointed out that copper does not disturb the trilonometric determination of nickel in the presence of tartaric acid even in the case of a pH 8-10. Experiments, however, showed that this is not the case. Investigations carried out by D.I. Ryabohikova and V.G. Sil'nichenko showed that sodium thiosulphate quickly destroys copper trilonate. The present method consists in using sodium thiosulphate for the reduction of  $\text{Cu}^{2+}$  in  $\text{Cu}^+$  with complex formation and that it is titrated in a transition from yellow to red-violet at pH 8.5 - 9.5 with trilon B. The results obtained show good agreement with those obtained by other methods. This method of determination is being employed in the

Card 1/2

The Trilonometric Determination of Nickel  
in Alloyed Copper Without Separation

32-3-4/52

laboratory of the "Kamensk-Uralsk Works for the Working of  
Nonferrous Metals". There are 2 tables, and 2 references, 2 of  
which are Slavic.

ASSOCIATION: Ural Polytechnic Institute imeni S.M. Kirov (Ural'skiy  
politekhnicheskiy institut im. S.M. Kirova)

AVAILABLE: Library of Congress

1. Copper alloys-Nickel-Determination 2. Tartaric acids-Application

Card 2/2

05853

5(2)

AUTHORS:

Kalinichenko, I. I., Nikitin, V. D., Stromberg, M. R.,  
Kir'yanova, T. M., Kotyayeva, K. A.

SOV/78-4-11-6/50

TITLE:

The Dissolution of Nickel in Nitric Acid

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11,  
pp 2443-2448 (USSR)

ABSTRACT:

The authors investigated the influence exerted by temperature, acid concentration and additions upon nickel dissolution and the composition of decomposition products of nitric acid. Experiments were made at 60, 80, and 100°C. Figures 1-3 and table 1 indicate the dissolution rate of Ni in 0.42 n - 12 n solution of HNO<sub>3</sub>. Temperature rise accelerates the dissolution. At constant temperature and increasing acid concentration, the dissolution rate rises up to a certain acid concentration, and is then reduced again at higher acid concentrations due to passivation. For 60°C, the dissolution rate has a maximum at an acid concentration of 6.5 - 7 n, for 80°C it is found at 8.5 - 9 n, and for 100°C at concentrations of above 9.0 n. Passage of oxygen had no effect within the temperatures and concentrations ap-

Card 1/3

The Dissolution of Nickel in Nitric Acid

05853

SOV/78-4-11-6/50

plied. Analysis of nitric acid on ammonium nitrate has shown that the quantity of the resultant  $\text{NH}_4\text{NO}_3$  was almost independent of temperature and remained fairly constant within the concentration range 0.46 - 7 n of nitric acid. About 90% of the amount of ammonium nitrate expected from the equation  $4\text{Ni} + 10\text{HNO}_3 =$

$= 4\text{Ni}(\text{NO}_3)_2 + \text{NH}_4\text{NO}_3 + 3\text{H}_2\text{O}$  was produced in this reaction.

Figures 4 and 5 show the effect of the added hydrogen peroxide, ferrinitrate and nickel nitrate as well as of mixtures of these three compounds. Addition of  $\text{H}_2\text{O}_2$  accelerates nickel dissolution by 2 - 2.5 times, while the formation of  $\text{NH}_4$  salts is reduced

to one-third at  $40^\circ\text{C}$  and to 16% approximately at  $100^\circ\text{C}$ .

$\text{Fe}(\text{NO}_3)_3$  accelerates the dissolution of Ni only above  $60^\circ\text{C}$ ,

whereas  $\text{Ni}(\text{NO}_3)_2$  diminishes the dissolution rate to one-half

between 40 and  $60^\circ\text{C}$ . At higher temperatures its effect decreases.

$\text{H}_2\text{O}_2 + \text{Fe}(\text{NO}_3)_3$  and  $\text{H}_2\text{O}_2 + \text{Ni}(\text{NO}_3)_2$  increase the dissolution

rate of Ni up to  $60^\circ\text{C}$ . At higher temperatures, rapid catalytic decomposition of  $\text{H}_2\text{O}_2$  takes place so that only the afore-men-

Card 2/3



NIKITIN, V.D.; KALINICHENKO, I.I.; TSYFANOVA, R.I.; STROMEERG, M.R.

Evaluation of reducing agents in the preparation of nitrates and  
sulfates of the chromium oxide from chromium anhydride. Trudy  
Ural. politekh. inst. no.94:84-89 '60. (MIRA 15:6)  
(Nitrates) (Sulfates) (Chromium compounds)

KALINICHENKO, I.I.; BOLDYREVA, A.I.

Trilonometric determination of nickel and copper from a single weighed sample in constantan-type alloys. Trudy Ural.politekh. inst. no.96:161-165 '60. (MIRA 14:3)

(Nickel-copper alloys)

S/153/60/003/003/014/036/XX  
B016/B058

AUTHORS: Kalinichenko, I. I., Knyazeva, A. A.  
TITLE: Photocolorimetric Determination of Nickel in Alloyed  
Copper Without Separation of the Latter

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i  
khimicheskaya tekhnologiya, 1960, Vol. 3, No. 3,  
pp. 418 - 421

TEXT: The authors report on the elaboration of a photocolorimetric method for the determination of nickel in alloyed copper, which makes it unnecessary to separate the copper. In the method used so far (with dimethyl glyoxime in the presence of an oxidizer in the alkaline or ammoniacal medium), copper had to be separated when its content exceeded that of nickel. Experiments showed that the brownish green color of the copper dimethyl glyoxime complex is destroyed by an addition of Trilon B, while the oxidized nickel dimethyl glyoxime complex is maintained. They recommend a sequence of adding the reagents which must be adhered to: to the solution to be analyzed, Seignette salt is added

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Card 1/3

Photocolorimetric Determination of Nickel S/153/60/003/003/014/036/XX  
in Alloyed Copper Without Separation of B016/B058  
the Latter

first, then the oxidizer (ammonium persulfate solution), then alkali, then dimethyl glyoxime in NaOH solution and only after 2 to 3 min, Trilon B. In this case, the coloring of the solution does not disappear, but is maintained for a long time. The authors further emphasize that at a great excess of alkali, Trilon B does not entirely destroy the copper dimethyl glyoxime. If the amount of ammonium chloride introduced binds the entire alkali, a total destruction of the brownish green color of the copper complex occurs. Small amounts of Trilon B do not influence the color intensity of the oxidized nickel dimethyl glyoxime. The amount of dimethyl glyoxime should be at least 3 mole per 1 mole Cu+Ni. A figure shows the absorption curve of the reagent solutions in various combinations. The authors achieved a good reproducibility of the coloring at a nickel content in copper not below 2.5% (Ni : Cu > 1 : 40). The nickel content in alloyed copper is 3.5-5.0%. The authors conclude from the results tabulated that their method produces accurate results, not inferior to those by other methods. They presume that nickel is more than bivalent in oxidized nickel dimethyl glyoxime. Papers by the following authors are mentioned: A. M. Dymov

Card 2/3

Photocolorimetric Determination of Nickel  
in Alloyed Copper Without Separation of  
the Latter

S/153/60/003/003/014/036/XX  
B016/B058

and O. A. Volodina (Ref.2), A. K. Babko and A. T. Pilipenko (Refs.3,5),  
M. D. Chekhovich and D. P. Shcherbov (Ref.4), K. B. Yatsimirskiy and  
Z. M. Grafova (Ref.6), V. M. Peshkova and N. V. Mel'chakova (Ref.9).  
The authors thank Ye. Ya. Mekhanoshina and T. I. Morova for checking  
the method and introducing it into practice. There are 1 figure,  
1 table, and 9 references: 8 Soviet and 1 British.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova;  
Kafedra obshchey khimii (Ural Polytechnic Institute  
imeni S. M. Kirov; Chair of General Chemistry)

SUBMITTED: November 17, 1958

Card 3/3

TIMOFFEYeva, Ye.G.; KALINICHENKO, I.I.; NIKITIN, V.D.; FURTOV, A.I.

Conditions for the preparation of lead metavanadate. Zhur.  
neorg.khim. 5 no.5:1168-1170 My '60. (MIRA 13:7)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova i  
Sverdlovskiy zavod "Khimicheskiye reaktivy."  
(Lead vanadate)

BOLDYREVA, A.I., assistant; KALINICHENKO, I.I., dotsent, kand. khim. nauk

Determination of nickel in steels and permalloys by the use of  
Trilon B. Sbor. nauch. trud. Ural. politekh. inst. no.122;  
128-132 '61. (MIRA 17:12)

S/075/62/017/007/004/006  
B119/B186

AUTHORS: Kalinchenko, L. P., and Kalinichenko, I. I.

TITLE: Titrimetric determination of beryllium by means of sulfosalicylic acid

PERIODICAL: Zhurnal analiticheskoy khimii, v, 17, no. 7, 1962, 840 - 843

TEXT: The determination of  $\text{Be}^{2+}$  by means of sodium salicylate or sulfosalicylate solution is based on the formation of the colorless ion  $[\text{Be}(\text{OH})(\text{C}_6\text{H}_4\text{OHCOO})_2]^{3-}$  or of the analogous sulfosalicylate compound.

Alberon or acid chrome blue K can be used as indicators. 3 moles of titrating agent are consumed per mole of beryllium sulfate. The most favorable pH value lies at 9 - 10. Ammonium chloride buffer, glyccoll buffer, and barbital buffer are suitable. Buffers containing acetate ion cannot be used for forming precipitates with beryllium. The disturbing effect of  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cd}^{2+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Co}^{2+}$ , and  $\text{Hg}^{2+}$  cations can be eliminated by masking them with complexone III. The content of  $\text{Cu}^{2+}$  and Al in the solution should not exceed the 80 times that

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KALINICHENKO, I.I.; KNYAZEVA, A.A.

Reply to the letter by A.K. Babko on the article by  
I.I. Kalinichenko and A.A. Kniazeva "Photocolorimetric  
determination of nickel in alloyed copper without separating  
it." Izv.vys.uch.zav.; khim.i khim.tekh. 5 no.4:685-687  
'62. (MIRA 15:12)

(Nickel—Analysis)  
(Babko, A.K.)

(Copper alloys)

KALINCHENKO, L.P.; KALINICHENKO, I.I.

Titrimetric determination of beryllium by means of sulfosalicylic acid. Zhur.anal.khim. 17 no.7:840-843 0 '62. (MIRA 15:12)

1. Sverdlovsk Medical Institute and S.M.Kirov Ural Polytechnical Institute, Sverdlovsk.

(Beryllium—Analysis) (Salicylic acid)

KALINICHENKO, I.I.; NIKITIN, V.D.; GAVRILOVA, R.A.

Studying the conditions for the preparation of pure ammonium  
lactate in the crystalline state. Prom. khim. reak. i osobo  
chist. veshch. no.1:8-13 '63. (MIRA 17:2)

MEKHAOSHINA, Ye.Ya.: KAD'NICHENKO, I.I.

Cadmium determination in copper alloys by the trilonometric  
method with the use of ion exchange. Trudy Ural. politekh. inst.  
no.130:48-53 '63. (MIRA 17:10)

KALINICHENKO, I.I.; STYUNKEL', T.B.; MIKHALEVA, Z.A.; MEKHANOSHINA,  
Ye.Ya.

Complexometric determination of zinc and nickel in nickel-silver  
type alloys, in one batch. Trudy Ural.politekh.inst. no.130:54-  
57 '63. (MIRA 17:10)

KALINCHENKO, V.P.; KALINICHENKO, I.I.

Complexometric determination of beryllium in copper alloys.  
Trudy Ural.politekh.inst. no.13: 70-73 '63.

(MIRA 17:10)

BOREYKO, M.K.; KALINICHENKO, I.I.

Polarographic study of an oxidized complex of nickel with dimethylglyoxime. Zhur. anal. khim. 20 no.1:31-35 '65. (MIRA 18:3)

1. Ural'skiy politekhnicheskii institut imeni Kirova, Sverdlovsk.

KALINICHENKO, I.M., inzh.; GORBACHEVA, N.S., inzh. (Krasnodar)

Construction of gas lines in Krasnodarsk Territory. Stroi. truboprov.  
6 no. 2:21-22 F '61. (MIRA 14:5)

(Krasnodarsk Territory---Gas pipes)



KALINICHENKO, I.M., inzh. (Krasnodar)

Develop new techniques for the construction of urban gas systems.  
Stroi.truboprov. 6 no.10:21 0 '61. (MIRA 14:10)  
(Gas pipes)

ACCESSION NR: AT4042680

S/0000/63/000/000/0182/0185

AUTHOR: Zharov, S. G.; Il'in, Ye. A.; Kovalenko, Ye. A.; Kalinichenko, I. R.; Karpova, L. I.; Mikerova, N. S.; Osipova, M. M.; Simonov, Ye. Ye.

TITLE: The study of the prolonged effects on man of an atmosphere with an increased CO<sub>2</sub> content

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 182-185

TOPIC TAGS: carbon dioxide effect, man, pressure chamber, acidosis, hypodynamia, fatigue

ABSTRACT: Two experiments were performed in which human subjects were kept in pressure chambers with a capacity of 7 cubic meters at an air temperature of 20+2°C and a relative humidity of 40 to 60%. Oxygen content varied from 19 to 22%. In the first experiment, the CO<sub>2</sub> level was maintained at 1% and in the second experiment at 2%. Two subjects were used in each experiment; each experiment lasted thirty days. Examination of the physiological indices indicates that the

Card 1/2

ACCESSION NR: AT4042680

presence of men in an atmosphere of limited capacity with an increased CO<sub>2</sub> content leads to acidosis, hypodynamia, and fatigue. The intensity of acidosis increases with an increase of CO<sub>2</sub> content from 1% to 2% and increases with the duration of time spent in the chamber. Subjects who remained in the test chamber for thirty days with a CO<sub>2</sub> content equal to 1% maintained their work capacity on a sufficiently high level. When exposed to physical loads, subjects who had spent thirty days in an atmosphere of 2%CO<sub>2</sub> manifested a sharp decrease in work capacity and a significant strain on the functions of the organism. However, the functional changes observed were completely reversible.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 2/2

ACCESSION NR: AT4042698

the subjects declined by 6--17% during the first month and by 34--36% during the second month. This was accompanied by a somewhat less marked decline in CO<sub>2</sub> production. At the same time, the respiratory coefficient rose from 0.75--0.82 to 0.97--1.1. The amount of heat given off by the organism of the subjects dropped during the first month by 7.5--14% and for the second month by 28--34.5%. The respiratory minute-volume decreased during the first month of the experiment on the average of 5--10% and during the second month by 9.5--25%. Prolonged stay in the chamber with lowered barometric pressure caused an increase in the heart rate by 8--10 beats (20%) and a lowering of the systolic pressure by 10--16% and of the diastolic pressure by 7--8%. The EKG performed during the course of this experiment did not show any substantial changes. There was, however, some reduction in the maximum values of the P and R peaks. A study of the peripheral blood indicated that hematological changes observed in the subjects during the course of the experiment were very insignificant. The changes in gas dynamics which were observed were strictly reversible. Respiratory indices of the two subjects returned to normal levels 8--10 days after the completion of the experiment.

ASSOCIATION: none

Card 2/3

AGADZHANYAN, N.A.; ZHAROV, S.G.; KALINICHENKO, I.R.; KARPOVA, L.I.;  
KAPLAN, Ye.Ye.; KUZNETSOV, A.G.; OSIPOVA, M.M.; MAZIN, A.N.;  
SERGIYENKO, A.V.

Effect of various rates of decompression on the human body.  
Voen. med. zhur. no.10:49-53 0 '65. (MIRA 18:11)

Card 1/3

L 58383-65  
ACCESSION NR: AP5017394

(760 mm Hg) and in a pressure chamber (7000 m) to determine the amount of oxygen absorbed and carbon dioxide evolved. It is generally considered that metabolism

ASSOCIATION: none

Cont 2/3

L 58383-65

ACCESSION NR: AP5017394

SUBMITTED: 29Dec63

ENCL: 00

SUB CODE: LS

NO REF SOV: 008

OTHER: 002

ATD PRESS: 4046

ACC NR: AP7000390

SOURCE CODE: UR/0239/66/052/012/1460/1462

AUTHOR: Kuznetsov, A. G. (Moscow); Kalinchenko, I. R. (Moscow)

ORG: none

TITLE: Prolonged stay of man in a gas medium containing an increased amount of CO<sub>2</sub>

SOURCE: Fiziologicheskii zhurnal SSSR, v. 52, no. 12, 1966, 1460-1462

TOPIC TAGS: hypercapnic atmosphere, physiologic effect, pressure chamber, respiratory physiology, human physiology

ABSTRACT: The aim of the present study was to explain the organism's reaction to the continuous action of a small (7.1—14.2 mm Hg) concentration of CO<sub>2</sub> in an inhaled gaseous mixture. Seven healthy men from 20—25 yrs were observed in a pressure chamber under normal atmospheric pressure and under reduced pressure. Tests lasted for 30 days. Frequency of respiration, changes of pulmonary ventilation, and analysis of inhaled and alveolar air were registered. The composition of CO<sub>2</sub> in alveolar air was determined by an optical-acoustical gas analyzer produced by the "Godart" firm. The results showed that prolonged breathing of gaseous mixtures with increased pCO<sub>2</sub> caused an increase in pCO<sub>2</sub> in the alveolar air and an increase in pulmonary ventilation. Thus, for example, in 30-day experiments in a gaseous medium with CO<sub>2</sub> concentration of 7.5—7.9 mm Hg, partial pressure of CO<sub>2</sub> in alveolar air in the experiments increased from 37.9—42.0 mm, and pulmonary ventilation rose 0.5—10. l/min. When CO<sub>2</sub> partial pressure in a gaseous mixture was 14.7—15.8 mm Hg,

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UDC: 612.744+612.67



ACC NR: AP7000390

Table 1.

Partial CO<sub>2</sub> pressure in alveolar air in test subjects before and after experiment (average data). Data before experiments are 100% base.

Composition of air	Test Subjects	Experimental conditions	Before experiment	After experiment	
			(in mm Hg)	in mm Hg	in %
pCO <sub>2</sub> in respired air 7.9, total pressure 308 mm Hg + normal pO <sub>2</sub>	Kh-n	Respiring atmospheric air	43.5	45.3	104
		physical activity	45.7	47.2	103
		Hyperventilation	18.1	11.6	63.7
	K-n	Respiring 5% mCO <sub>2</sub>	45.8	54.9	120
		At rest	41.3	43.3	105
		physical activity	43.6	53.0	121
pCO <sub>2</sub> in respired air 14.7, total pressure 760 mm Hg	P-s	Hyperventilation	23.1	13.5	58.1
		Respiring 5% mCO <sub>2</sub>	45.8	56.8	124
		At rest	37.0	44.0	119
	P-s	Respiring atmospheric air	42.5	47.7	112.2
		physical activity	16.6	21.2	128
		Hyperventilation	46.2	55.0	119
	U-n	Respiring 5% mCO <sub>2</sub>	40.0	41.0	102.2
		At rest	41.7	47.6	114
		physical activity	18.1	21.0	116
		hyperventilation	45.3	48.0	106

Card 2/3

ACC NR: AP7000390

pulmonary ventilation increased to 1—2.5 l/min. In the course of the experiments, no parallelism was noted between the changes in pulmonary ventilation and  $\text{CO}_2$  in alveolar air. To determine the sensitivity of the respiratory center to  $\text{CO}_2$  after a prolonged stay in gaseous medium containing 7.9 and 14.7 mm Hg  $\text{CO}_2$ , the amount of  $\text{CO}_2$  in alveolar air was determined by breathing a hypercapnic gaseous mixture (5%  $\text{CO}_2$  and 20%  $\text{O}_2$ ) and regular air. The results appear in Table 1. The decreased amount of inhaled air, and the decreased sensitivity of the respiratory center to  $\text{CO}_2$  give a basis for the conclusion that an organism is apparently capable of adapting to the prolonged action of a gaseous medium containing a small concentration of  $\text{CO}_2$ . Orig. art. has: 1 table and 1 figure. [SC]

SUB CODE: 06/ SUBM DATE: 27Jul65/ ORIG REF: 005/ OTH REF: 003/ ATD PRESS: 5110

Card 3/3

ACC NR: AT6036616

SOURCE CODE: UR/0000/66/000/000/0300/0302

AUTHOR: Parin, V. V.; Agadzhanyan, N. A.; Kuznetsov, A. G.; Barov, A. S.;  
Isabayeva, V. A.; Mirrakhimov, M. M.; Davydov, G. A.; Kalinichenko, I. A.;  
Korobova, A. A.; Karpova, L. I.; Nikulina, G. A.; Tikhonirov, Ye. P.; Sokol, Ye. A.;  
Gavrilov, B. A.

ORG: none

TITLE: Establishing the possibility of using alpine acclimatization for the  
preparation and training of cosmonauts (Paper presented at the Conference on Problems  
of Space Medicine held in Moscow from 24-27 May 1966)

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy  
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii,  
Moscow, 1966, 300-302

TOPIC TAGS: hypoxia, high altitude physiology, alpine acclimatization,  
cosmonaut training

ABSTRACT:

Tasks of the present study were to:

1. Conduct complex physiological and clinical investigations during the  
process of acclimatization at altitudes of 3300 to 4100 m.

Cord 1/4

ACC NR: AT6036616

2. Study the influence of alpine acclimatization on human tolerance to extremal spaceflight factors.

3. Study the comparative resistance of alpine inhabitants, valley inhabitants, and alpinists to extremal factors.

4. Develop a system of alpine acclimatization for cosmonauts and issue recommendations on the application of alpine acclimatization for the preparation and training of cosmonauts and on the creation of alpine camps for cosmonauts.

Acclimatization was conducted at the alpine station of the Kirgiz State Medical Institute (Tuya-Ashu mountain pass, altitude, 3300 to 4100 m). A total of 28 male subjects were studied of whom: 11 were indigenous to alpine conditions as farmers of the Tien-Shan--Pamir region (2000 to 2500 m), 11 were valley inhabitants, and 6 were accomplished alpinists. The following indices were studied under alpine conditions and using test stands: Functional condition of the central nervous system; external respiratory and cardiovascular system function; some biochemical indices; the state of the blood coagulation and anticoagulation capacity; and in separate experiments; cerebral circulation using an electroplethysmographic method.

Card 2/4

ACC NR: AT036616

The experiments showed that after 45 days of alpine acclimatization, human tolerance to prolonged, back-chest accelerations (8 to 10 G) was improved. This was reflected in a relative increase in the amplitude of rheoencephalograms for all subjects and consequently, improved cerebral circulation and lowered pulse rate. EKG changes indicated that the heart was undergoing less strain after alpine acclimatization. After residence in alpine conditions, a decrease in basic metabolic indices and a slight increase in arterial blood oxygen saturation was noted in alpine inhabitants during accelerations.

A study of heat tolerance showed that there was a drop in basic physiological parameters (heat accumulation and basal metabolism) after alpine acclimatization in all three groups. These changes were more pronounced in indigenous alpine inhabitants and less pronounced in alpinists.

The resistance of the organism to hypoxia before and after acclimatization was studied using two approaches; exposure to a certain "altitude ceiling" in a pressure chamber and a method of reverse respiration using a spiograph first filled with atmospheric air. In the latter case as a measure of oxygen consumption, oxygen content under the bell jar of the spiograph decreased and exhaled carbon dioxide was chemically absorbed.

Card 3/4

L 08271-67 -- EWT(4) SGTB DD/GD

ACC NR: AT6036466

SOURCE CODE: UR/0000/66/000/000/0010/0011

AUTHOR: Agadzhanyan, N.A.; Kalinichenko, I. R.; Kuznetsov, A. G.; Lepikhova, I. I.; Nikulina, G. A.; Osipova, M. N.; Rutova, M. B.; Sergiyenko, A. V.; Shvchenko, Yu. V.

ORG: none

TITLE: Effect of rapidly increasing hypoxia on the human organism (Paper presented at conference on problems of space medicine held in Moscow from 24-27 May 1966) 23  
B+1

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 10-11.

TOPIC TAGS: hypoxia, spirometry, electrocardiogram, human physiology

ABSTRACT:

In order to determine the time available for taking countermeasures during a rapid drop in partial oxygen pressure, the resistance of the body to rapidly increasing hypoxia was studied in 28 human subjects by the re-breathing method using a spirometer filled at the start with 8.5 l of atmospheric air. The O<sub>2</sub> content of this air decreased as the oxygen was used up; CO<sub>2</sub> was chemically absorbed.

Card 1/3

ACC NR: AT6036466

The external appearance of the subjects, their behavior, and reported subjective sensations were monitored as a check on their general condition; data were recorded on conditioned reflex activity, brain biocurrents, motor coordination, the functional state of the cardiovascular and respiratory systems and blood oxygen absorption levels; and studies of the composition of peripheral blood and the functional state of the adrenal cortex were made.

The results showed that rapidly increasing hypoxia produces functional changes leading to loss of consciousness if oxygen is not quickly administered. Reserve time (time from beginning to breathe the hypoxic mixture until the hypoxic mixture is cut off) amounted on the average to 6 min 28 sec (5 min 27 sec to 10 min 02 sec). This was equivalent to an "altitude ceiling" of 10150 m (9100 to 11400 m). The  $O_2$  content in the respired air at the end of the experiment was 4.44% ( $pO_2 = 31.3$  mm Hg); blood oxygen saturation dropped to an average of 53.2% (42% to 64%). Hypoxia symptoms observed during the experiment included: cyanosis of the epidermis and mucosa; dyspnea, drowsiness, impaired handwriting, and sometimes even muscle spasms in the hands. Many subjects complained of respiratory distress, dizziness, dimness of vision, heat, headache, etc.

Card 2/3

ACC NR: AT6036466

The latent period in time required to solve arithmetical problems increased and motor coordination was impaired. Both the time required to solve problems and the number of errors increased more than three-fold over initial data.

Three phases were distinguished in EEG changes: 1) suppression of the alpha rhythm; 2) reactivation of alpha rhythm; 3) onset of slow waves (2 to 4 per inch).

Frequency and depth of respiration and minute volume increased during hypoxia, and the oxygen requirement and  $O_2$  utilization coefficient decreased. Arterial oxygen saturation decreased from 46% to 98% at the start to 49% to 55% at the end of the experiment.

EKGs made during rapidly increasing hypoxia showed a progressive increase in the pulse rate and a decrease in the amplitude of R and T waves.

Peripheral blood composition immediately and one hour after exposure to hypoxia showed increased erythrocyte counts and hemoglobin content. The amount of 17-oxycorticosteroids in the plasma increased from 16 to 17  $\gamma\%$  at the onset of 35.3 to 44.2  $\gamma\%$  during the aftereffect period.

W.A. No. 22. ATD Report 66-1167  
Card 3/3 SUB CODE: 06 / SUBM DATE: 00May66



KALINICHENKO, I.S., inzh.

Electric transformers with 330 to 500 kv. ratings. Vest.  
elektroprom. 32 no.3:1-4 Mr '61. (MIRA 15:6)  
(Electric transformers)

KALINICHENKO, I.S.

Transformation coefficient of a 220/110 kv. autotransformer. Energ.  
i elektrotekh. prom. no.1:22-24 - Ja-Mr '63. (MIRA 16:5)

1. Zaporozhskiy nauchno-issledovatel'skiy institut transformatoro-  
stroyeniya i vysokovol'tnoy apparatury.

(Electric transformers) (Electric power distribution)

KALINICHENKO, I.S., inzh.

Manufacture of electrical transformers in France. Elektro-  
tekhnika 34 no.11:77-80 N '63. (MIRA 17:2)

MAKUNICHENKO, I.S., inzh.

Hidden potentials in improving transformers and increasing their  
power limits. Elektrotehnika 35 no.2:32-35 Apr '64.

(MIRA 17:5)

KALINICHENKO, I.S., inzh.

Nominal potentials and regulation range of 110 kv. transformers  
with voltage regulation under load. Elek. sta. 35 no.3:44-45  
Mr '64. (MIRA 17:6)

KALINICHENKO, I.S., inzh.

Concerning the article "Standardized tests of electrical steel using  
a.c.". Elektrotehnika 36 no.7:58 J1 '65. (MIRA 18:7)

SHNAYDERMAN, S.Ya.; KALINICHENKO, I.Ye.

Acetate complexes of titanium. Dokl. AN SSSR 139 no.4:910-912  
Ag '61. (MIRA 14:7)

1. Kiyevskiy politekhnicheskii institut. Predstavleno akademikom  
A.A. Grinbergom.

(Titanium compounds)

SHNAYDERMAN, S.Ya.; KALINICHENKO, I.Ye.

Pyrocatechol complexes of titanium. Zhur.neorg.khim. 6 no.8:1843-1849  
Ag '61. (MIRA 14:8)

(Titanium compounds) (Pyrocatechol)



SHNAYDERMAN, S.Ya.; KALINICHENKO, I.Ye.

Extraction of phenolic complexes of titanium. Ukr.khim.zhur.  
27 no.3:402-407 '61. (MIRA 14:11)

1. Kiyevskiy politekhnicheskii institut.  
(Titanium compounds)  
(Phenol)

SHNAYDERMAN, S.Ya.; KALINICHENKO, I.Ye.

Complexes of titanium with pyrogallol. Izv.vys.ucheb.zav.; khim.i  
khim.tekh. 4 no.6:897-904, '61. (MIRA 15:3)

1. Kiyevskiy politekhnicheskoy institut, kafedra analiticheskoy  
khimii.

(Titanium compounds) (Pyrogallol)

BABKO, A.K.; KALINICHENKO, I.Ye.

Chemiluminescent method for the quantitative determination of  
ferricyanides. Ukr. Khim. zhur. 29 no.5:527-532 '63.

(MIRA 16:9)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 27651-66 EWP(j)/EWI(m) RM

ACC NR: AF6018494

SOURCE CODE: UR/C073/65/031/010/1092/1097

AUTHOR: Babko, A. K.; Kalinichenko, I. Ye.

ORG: Institute of General and Inorganic Chemistry, AN UkrSSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Iron complexes with sulfosalicylaldehyde-ethylenediamine and their role in chemiluminescence of luminol

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 10, 1965, 1092-1097

TOPIC TAGS: chemiluminescence, catalysis, oxidation reduction reaction, organoiron compound, complex molecule

ABSTRACT: Complexes of iron with salicylaldehyde-ethylenediamine (SED) and its sulfur derivative (SSED) are known catalysts for the decomposition of hydrogen peroxide and for the oxidation of various substances by hydrogen peroxide or oxygen. These complexes with Schiff bases are one of a few compounds of iron, which exhibit catalytic activity in oxidation-reduction reactions in a basic medium. Iron complexes with SED intensify the chemiluminescence of a basic mixture of hydrogen peroxide and luminol.

In this report iron complexes with SSED and the chemiluminescent reaction of the oxidation of luminol by hydrogen peroxide in the presence of these complexes were studied. Measurement of the light

Card 1/2

UDC: 535.379

L 27651-66

ACC NR: AP6018494

absorption by the solutions indicated that the complex, Fe SSED, stable at a pH of 3-6, is converted into the hydroxycomplexes Fe CCED(OH<sup>-</sup>) and others in the basic medium where luminescence is observed. In the course of the chemiluminescent reaction the hydroxycomplexes are rapidly decomposed by hydrogen peroxide which is accompanied by a decrease in luminescence intensity. The effect of concentrated conditions on the initial luminescence intensity was studied. The optimal pH value was 10.5-11.5. Initial luminescence intensity is proportional to the concentrations of iron and hydrogen peroxide and does not depend on the concentration of SSED, and also on the concentration of luminol if the latter exceeds  $10^{-4}$  -  $10^{-5}$  mol. According to calculations the decomposition rate of the iron complexes coincides with the luminol oxidation rate. An hypothesis was made on the fact that this oxidation is accomplished by the products of the interaction of hydrogen peroxide with coordinated SSED. Orig. art. has: 7 figures and 2 formulas. [JPRS]

SUB CODE: 07 / SUBM DATE: 26Jan65 / ORIG REF: 003 / OTH REF: 011

Card

2/2

L 1923-66 EWT(m)/EWP(j) RM

ACC NR: AP5026584

SOURCE CODE: UR/0073/66/031/010/1101/1103

AUTHOR: Kalinichenko, I. Ye. 5

ORG: Institute of General and Inorganic Chemistry, AN UkrSSR (Institut obshchey i ne- 31  
organicheskoy khimii AN UkrSSR) 55 27 55 27 23

TITLE: Chemiluminescence of luminol during the interaction of hydrogen peroxide with  
acetylacetone and acetoacetic ester 55 27 55 27

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 10, 1965, 1101-1103

TOPIC TAGS: chemiluminescence, hydrogen peroxide, iron compound

ABSTRACT: Chemiluminescent reactions of luminol ( $H_2L$ ) involving acetylacetone (AA) and acetoacetic ester (AE) were studied. In the case of acetylacetone, traces of iron were a necessary component of the reaction: addition of ferric sulfate increased the luminescence of the mixture  $H_2O_2 + AA + H_2L$ . Optimum pH was 10.5. At sufficiently high AE concentrations ( $> 10^{-3}$  mole) and low  $H_2O_2$  concentrations ( $\leq 10^{-3}$  mole), oxygen increased the luminescence considerably. Oxygen had no appreciable effect in experiments with AA. The effects observed are explained by the fact that the products of the reaction between  $H_2O_2$  and the organic compounds cause the oxidation of luminol by oxygen. The effect of oxygen on the oxidation rate is an indirect proof of the participation of free radicals, formed by the decomposition of organic peroxides, in the reactions studied. Measurements of the oxidation rate

Card 1/2

UDC 535.379

L 4923-66

ACC NR: AP5026584

of AA in the presence of iron showed that iron does not affect the rate of the reaction between acetylacetone and hydrogen peroxide; hence, the traces of iron catalyze the subsequent processes. Orig. art. has: 2 figures and 1 table.

SUB CODE: GC / SUBM DATE: 10Jul64 / ORIG REF: 004 / OTHER REF: 006

BC  
Card 2/2

BABKO, A.K.; KALINICHENKO, I. Ye.

Chemiluminescence method of determining microgram quantities  
of iron. Ukr. khim. zhur. 31 no. 12:1316-1320 '65  
(MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.  
Submitted June 3, 1965.



KALINICHENKO, Kh.B.; ROMANIV, O.N.

Torsion hardening of low-carbon steel. Vliian. rab. sred na svcis. mat.  
no.3:100-106 '64. (MIRA 17:10)

KALINICHENKO, K. V.

Kalinichenko, K. V. "The effect of the mineral part of hay infusions on gastric secretions," Trudy Dnepropetr. s. -kh. in-ta, Vol. II-III, 1948, p. 43-56  
- Bibliog: 9 items

SO: U-3261, 10 April 53, (Letopis 'shurnal 'nykh Statey, No. 12, 1949)

KISLITSA, Georgiy Vasilyevich, rabochiy-vzryvnik; BONDARENKO, I.,  
brigadir; KALINICHENKO, L., rabochiy ochistnogo zaboya

We are the trade union. Sov.shakht. 10 no.12:20-23 D '61.  
(MIRA 14:12)

1. Predsedatel' uchastkovogo komiteta uchastka No.5 shakhty  
imeni Gor'kogo tresta Nesvetayantratsit v Rostovskoy oblasti (for  
Kislitsa). 2. Chleny uchastkovogo komiteta uchastka No.5  
shakhty imeni Gor'kogo tresta Nesvetayantratsit v Rostovskoy  
oblasti (for Bondarenko, Kalinichenko).

(Trade unions)

(Coal miners)

KALINICHENKO, L. A.

PA 21/49T87

USSR/Medicine - Biology  
Medicine - Heredity, Mechanism

Apr 48

"The Doctrine of Michurin and Lysenko and Other  
Contemporary Medicobiological Problems," L. A.  
Kalinichenko, N. N. Zhukov-Verezhnikov, 12 3/4 pp

"Vest Ak Med Nauk SSSR" No 4

Outlines basic precepts of Michurin-Lysenko doctrine.  
Praises work of various scientists whose work conforms  
with these precepts. Censures A. S. Krivitskiy, Ravich-  
Birger, Alikhanyan (see 41T59) and others. Weissmann-  
Morgan influence can be especially harmful when applied  
to cancer research. Criticizes work of Ye. A. Finkel'  
shateyn and N. M. Petrov.

21/49T87

KALINICHENKO, L. A.

KALINICHENKO, L. A.

Science

Origin of life on earth. Moskva, Gos. izd-vo kul'turno-prosvetitel'noi lit-ry, 1951.

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

USSR/Microbiology. General Microbiology

F

Abs Jour : Ref Zhur-Biol., No .3, 1958, 57435

Author : Zhukov-Vereshnikov N. N., Mayskiy I. N. Kalini-  
chenko I. A.

Inst : Not given

Title : More on the Problems of the Specie and Specie  
Variability in Microbiology (On the Discussion  
of the Problem of Specie Variability)

Orig Pub : Uspekhi sovrem. biologii, 1955, 39, No2, 245-252

Abstract : Previously published experimental data on the  
variability of microbes overstepping the bounds  
of the specie are cited. In the author's opinion  
the facts obtained in these works confirm the  
theory of specie formation of T. D. Lysenko. On  
the basis of the immunological investigations  
conducted by the author and coworkers N. V.

Card 1/2

MALINOVSKIY, E.V.; GLADYSH, A.L.; KALINICHENKO, L.A.

Data input and output in the electronic computer "Ural" by  
means of the ST-A equipment. Avtom.i prib. no.1:35-38 Ja-Mr  
'62. (MIRA 15:3)

1. Vychislitel'nyy tsentr AN USSR.  
(Electronic calculating machines)

L 3655-66

EWP(a)/EDA(s)-2/EWT(m)/EWP(w)/EPF(c)/EWP(i)/ETC/EPF(n)-2/ENG(m)

ACCESSION NR: AT5024877

EPA(a)-2/T/EWP(t)/EWP(b) IJP(c)

JD/WH/JG/GS/AT/WH

UR/0600/65/000/000/0120/0126

AUTHOR: Basov, V. P.; Kalinichenko, L. F.; Epik, A. P.

44,55

44,55

44,55

TITLE: Use of refractory metals in the electrochemical industry

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Diffuzionnyye pokrytiya na metallakh (Diffusion coatings on metals). Kiev, Naukova dumka, 1965, 120-126

TOPIC TAGS: refractory metal, electrochemistry, electrolysis, corrosion resistance, electrode

ABSTRACT: The problem of selecting a stable electrotechnical material suitable for use as a current conductor in highly aggressive media is particularly important to industry. From this standpoint, titanium shows great promise in view of its high strength, high melting point, low specific weight, and high corrosion resistance, the latter due to the presence of a surface oxide film which forms virtually instantaneously on the freshly treated surface. Since, however, the oxide films coating the surface of Ti cause a relatively high voltage drop on electric contact with certain widely used electrotechnical materials (e.g.,

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ACCESSION NR: AT5024877

<sup>15</sup>  
graphite, mercury), thus leading to excessive losses of electric energy, overheating of the contacts, and other complications, it is expedient to replace them with coatings of some at least equally corrosion-resistant, but more electroconducting compounds (of the carbide, boride, and nitride types). In this connection, the technique of deposition also matters. Research and development work on the selection of compounds assuring a minimal voltage drop, and on the optimal techniques of their deposition, is already in progress. This problem is particularly important to the chlorine industry, where, chlorine electrolysis involves a highly aggressive medium and where a still greater problem is that of developing an insoluble anode to replace the troublesome graphite anode. Research into new, more effective anode materials is in progress. Thus, Soviet scientists have started laboratory tests of specimens of different refractory materials resistant to aggressive media: the carbides of Ti, Zr, Cr, Mo, W, carbidized Ti; the borides of Ti, Zr, Cr, boronized Ti; the nitrides of Ti, Zr, Cr, nitrified Ti; and molybdenum silicide. These studies have not yet produced the desired results, but this is no reason for discontinuing them, as proved by the recent publication of two patents (Ioffe, A. F. Fizika poluprovodnikov, Moscow, Izd-vo AN SSSR, 1957; Beet, H. Canadian Patent No. 643672, 1962) pertaining to a corrosion-resistant electrode used as an anode in electrolysis and consisting of a metal (Ti, Cr, Nb)

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L 3655-66

ACCESSION NR: AT5024877

or its alloy coated with an electroconducting metal nitride. Orig. art. has:  
2 figures, 1 table. *44,55*

ASSOCIATION: Institute of Problems in Materials Science, AN UkrSSR (Institut problem  
materialovedeniya, AN UkrSSR)

SUBMITTED: 06Aug65

ENCL: 00

SUB CODE: MM, GC

NO REF SOV: 005

OTHER: 005

*PC*  
Card 3/3

S/075/62/017/001/004/006  
B119/B186

AUTHORS: Kalinchenko, L. P., and Kalinichenko, I. I.

TITLE: Titrimetric determination of beryllium by means of sulfasalicylic acid

PERIODICAL: Zhurnal analiticheskoy khimii, v, 17, no. 7, 1962, 840 - 843

TEXT: The determination of  $\text{Be}^{2+}$  by means of sodium salicylate or sulfosalicylate solution is based on the formation of the colorless ion

$[\text{Be}(\text{OH})(\text{C}_6\text{H}_4\text{OHCOO})_2]^{3-}$  or of the analogous sulfosalicylate compound.

Alberon or acid chrome blue K can be used as indicators. 3 moles of titrating agent are consumed per mole of beryllium sulfate. The most favorable pH value lies at 9 - 10. Ammonium chloride buffer, glycocoll buffer, and barbitol buffer are suitable. Buffers containing acetate ion cannot be used for forming precipitates with beryllium. The disturbing effect of  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cd}^{2+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Co}^{2+}$ , and  $\text{Hg}^{2+}$  cations can be eliminated by masking them with complexone III. The content of  $\text{Cu}^{2+}$  and Al in the solution should not exceed the 80 times that  
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S/075/62/017/007/004/006  
B119/B186

Titrimetric determination of...

of  $\text{Be}^{2+}$ . Fe in large quantities flocculates as hydroxyde, thus disturbing the determination. There are 5 tables. The most important English-language reference is: H. V. Meek and Ch. V. Banks, Analyt. Chem. 22, 1512 (1950).

ASSOCIATION: Sverdlovskiy meditsinskiy institut (Sverdlovsk Medical Institute). Ural'skiy politekhnicheskiy institut im. S. M. Kirova, Sverdlovsk (Ural Polytechnic Institute imeni S. M. Kirov, Sverdlovsk)

SUBMITTED: October 11, 1961

Card 2/2

SKULACHEV, V.P.; MASLOV, S.P.; SIVKOVA, V.G.; KALINICHENKO, L.P.;  
MASLOVA, G.M.

Cold uncoupling of oxidation and phosphorylation in the muscles  
of albino mice. Biokhimiia 28 no.1:70-79 Ja-F '63. (MIRA 16:4)

1. Chair of Animal Biochemistry, State University, Moscow.  
(PHOSPHORYLATION) (OXIDATION, PHYSIOLOGICAL)  
(COLD--PHYSIOLOGICAL EFFECT)

KALININ, A. (poselok Mel'nichnyy Ruchey, Leningradskoy obl.); POPKOV, V.,  
inzh. (Khar'kov); PERETS, F. (Bronnitsy, Moskovskoy obl.);  
KUZNETSOV, P. (Leningrad); MATVEYENKO, I., mekhanik (Alatyr');  
KALINICHENKO, M. (Leningrad); IKKERT, G. (Otradnyy, Kuybyshevskoy  
obl.); DUDIKOV, N.; BUKANOV, A.

Readers suggest. Za rul. 21 no.7:18-19 J1 '63. (MIRA 16:8)  
(Motor vehicles--Technological innovations)

W450 L 05134-67 EWT(1) JK

ACC NR: AP6031134 SOURCE CODE: UR/0438/66/028/004/0056/0061

AUTHOR: Nechayevs'ka, M. R. -- Nechayevskaya, M. R. ; Cherkas, G. P. --  
Cherkes, G. P. ; Kalinichenko, M. F. -- Kalinichenko, N. F. ; Biryukova, S. V. ;  
Berezhkivs'ka, L. Ya. -- Berezhkovskaya, L. Ya. ; Pidgorna, L. G. -- Podgornaya,  
L. G. ; Mukhina, A. O. -- Mukhina, A. A. ; Polchenko, O. T. ; Leybova, I. M. ;  
Konik, V. Ya.

ORG: Khar'kov Institute of Vaccines and Sera im. Mechnikov (Kharkivs'kyy  
institut vaktsin i sirovstok)

TITLE: Formation conditions of anatoxins of Clostridium perfringens, Cl.  
Oedematiens and Cl. septicum from toxins obtained in meatless media

SOURCE: Mikrobiologichnyy zhurnal, v. 28, no. 4, 1966, 56-61

TOPIC TAGS: toxoid, toxin, clostridium perfringens, Clostridium oedematiens,  
Clostridium septicum, bacteria toxin

ABSTRACT: Detoxification conditions for Clostridium perfringens, Cl. oedematiens  
and Cl. septicum toxins were studied. Cl. perfringens is best denatured by adding  
two doses of 0.3 and 0.2% formaline at 24-hr-intervals, while maintaining the pH

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ACC NR: AP6031134

of the medium between 7.2—7.4, and the temperature at 38C. Detoxification takes seven to ten days under these conditions. The antitoxin-fixing activity of the toxoid obtained fluctuates between 4 and 8 EC with the native toxin titer being 400—800 Dlm/ml. The best procedure for denaturation of *Cl. oedematiens* toxin is addition of 0.4% Formalin. A temperature of 38C is maintained for two days, followed by storage at room temperature for 5—7 days. Toxoids with antitoxin-fixing activities of 70--120 EC and a native toxin activity of 15,000--22,000 Dlm/ml were obtained. The *Cl. septicum* was denatured with minimum loss of antitoxin-fixing properties by the addition of two consecutive doses of 0.15 and 0.1% Formalin, at 38C for two days with subsequent storage at room temperature for 5—7 days. The resulting toxoids have an activity of 2--4 EC with native toxin titers of 200--400 Dlm/ml. [Based on authors' abstract] [W.A. 50] [GC]

SUB CODE: 06, 13/ SUBM DATE: 07Apr65/

Card 2/2



W.A. 50

L 05126-67

EW(1) JK

20A-50

ACC NR: AP6031135 SOURCE CODE: UR/0438/66/028/004/0075/0077

AUTHOR: Kalynychenko, M. F. --Kalinichenko, N. F.

10

B

ORG: Khar'kov Institute of Vaccines and Serums im. I. I. Mechnikov (Kharkiv'-s'kyy n-d institut vaksin i sirovatok)

TITLE: Study of the antigenic structure of anatoxins of Cl. perfringens Cl. oedematiens, Cl. septicum and Cl. tetani by determination of their fixation properties

SOURCE: Mikrobiologichnyy zhurnal, v. 28, no. 4, 1966, 75-77

TOPIC TAGS: toxoid, fixation activity

ABSTRACT: The author determined the fixation activity of Cl. perfringens, Cl. oedematiens, Cl. septicum and Cl. tetani toxoids by lethality, hemolysis (alpha and theta), necrotic, collagenase, gelatinase and hyaluronidase tests. Various toxoid series differed in fixation activity. [Based on author's abstract] [GC]

[W.A. 50]

SUB CODE: 06/ SUBM DATE: 30Mar66/

Card 1/1

SHISHKIN, Nikolay Fedorovich, kand.tekhn.nauk; OLEKSEVICH, Valeriy Pavlovich;  
 DANILIN, Petr Yakovlevich; MIKHEYEV, Yuriy Aleksandrovich; SYCHEV,  
 Leonid Ivanovich. Prinimali uchastiye: SHALAGIMOVA, T.S., inzh.;  
 SMORODINSKIY, Ya.M., kand.tekhn.nauk; KALINICHENKO, M.F., inzh.;  
 CHASHKIN, Ye.V., inzh.; ASTAF'YEV, V.D., inzh.; PROKOP'YEV, V.I.,  
 vedushchiy konstruktor; ROGOV, V.A., starshiy master; MOSKALENKO, V.M.,  
 laborant; GERASIMOV, N.F., laborant; POPOV, N.A., kand.fiziko-matem.  
 nauk; KALINICHENKO, M.F., inzh.. LYUBIMOV, N.G., otv.red.; ALADOVA,  
 Ye.I., tekhn.red.; PROZOROVSKAYA, V.L., tekhn.red..

[Protection of the electric equipment and cable networks in mines]  
 Zashchita shakhtnykh elektroustanovok i kabel'nykh setei. Pod red.  
 N.F.Shishkina. Moskva, Ugletekhizdat, 1959. 242 p. (MIRA 12:3)  
 (Electricity in mining) (Electric cables)

Kalinichenko, N.

RUMANIA/Geochemistry. Cosmochemistry. Hydrochemistry. D

Abs Jour: Referat Zhur - Khim, No. 9, 1959, 30907

Author : Kalinichenko, N., Antokhi, Ye

Inst : Iasi University

Title : Salinity Changes in the Rumanian Black Sea  
Delta and in the Coastal Lakes Tekigyol,  
Adzhidzhya, and a Nameless Lake.

Orig Pub: An Stiint Univ Iasi, 1957, No 1-2, Sec I, 287-294

Abstract: Measurements of Black Sea salinity from density  
date made on 8-13 August 1954 (14.1-23.76 parts  
per 1000) and 17-31 July 1956 (16.48-19.42 parts  
per 1000) have shown fluctuations in the salinity  
as a function of wave conditions and mixing with  
Danube waters. The variation in the salinity of  
the coastal lakes Tekigyol (14 August 1954, about  
103 parts per 1000; 19-28 July 1956, 81.31-84.53

Card 1/2

KALINICHENKO, N. F.

KALINICHENKO, N. F. -- "The Use of Some Antibiotics in Experimental Gas Gangrene Caused by Clostridium Oedematiens and Clostridium Septicum." Min Health Ukrainian SSR. Khar'kov State Medical Institute. Khar'kov, 1955. (Dissertation for the Degree of Candidate in Medical Sciences.)

So; Knizhaya Letopis' No 3, 1956